

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

frre Application of: Kenneth E. Welker et al.

Serial Number: 10/598,732

Confirmation Number: 9557

Filed: September 8, 2006

Entitled: MARINE SEISMIC SURVEY

SYSTEM AND METHOD

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Dear Sir:

Group Art Unit: Unknown

Examiner: Unknown

Atty Dkt No.: 14.0248-PCT-US

INFORMATION DISCLOSURE STATEMENT

The applicants and the attorney who signs below on the basis of the information supplied by the inventor and the information in this file, submit herewith patents, publications, or other information of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

While the information submitted in this Information Disclosure Statement may be material pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication, or other information referred to therein is prior art for this invention unless specifically designated as such.

In accordance with 37 CFR § 1.97, this Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information as defined under 37 CFR § 1.56(a) exists.

The patents and/or publications submitted herewith are set forth on the attached Form PTO-1449.

5

If the sum of \$180.00 is due under 37 CFR § 1.17(p), the Commissioner is hereby authorized to charge this fee, and any other fee necessary to make this submission timely, to the Deposit Account 50-1720.

Respectfully submitted,

Liangang (Mark) Ye

Registration Number 48,276

WesternGeco, L.L.C.

10001 Richmond Avenue

Houston, Texas 77042

Telephone: (713) 689-5799 Facsimile: (713) 689-1977

CERTIFICATION OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as FIRST CLASS MAIL in an envelope addressed to: Commissioner for Patents, USPTO, P.O. BOX 1450, Alexandria, VA 22313-1450 on: December 27, 2006.

By: Carolanne King Carolanne M. King

Date Signed

Please type a plus sign (+) inside this box \rightarrow $\boxed{+}$

Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office: U.S. DEPARTME
Under the Paperwork Reduction Act of 1995, no persons are required to responder a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	of	3

	Complete if Known	
Application Number	10/598,732	
Filing Date	September 8, 2006	
First Named Inventor	Kenneth E. Welker	
Group Art Unit	Unknown	
Examiner Name	Unknown	
Attorney Docket Number	14.0248-PCT-US	

Examiner	Cite	U.S. Patent Docume	nt	Name of Patentee or Applicant	Date of Publication	Pages, Columns, Lines, Where Relevan
Initials*	No.1		Code ²	of Cited Document	of Cited Document	Passages or Relevant Figures Appear
	A1	7,047,898	B2	Petersen et al.	05/23/2006	
	A2	2005/0219948	A1	Naess	10/06/2005	
	A3	6,932,017	B1	Hillesund et al.	08/23/2005	
	A4	6,873,571		Clayton et al.	03/29/2005	
	A5	2004/0196737	A1	Nicholson	10/07/2004	
	A6	2004/0136266	A1	Howlid et al.	07/15/2004	
	A7	2004/0060498	A1	Petersen et al.	04/01/2004	
	A8	6,691,038	B2	Zajac	02/10/2004	
	A9	6,681,710	B2	Semb	01/27/2004	
	A10	6,671,223	B2	Bittleston	12/30/2003	
	A11	6,590,831	B1	Bennett et al.	07/08/2003	
	A12	2003/0220745	A1	Campbell	11/27/2003	
	A13	2003/0168277	A1	Hopperstad et al.	09/11/2003	
	A14	2003/0151974	A1	Kutty et al.	08/14/2003	
	A15	2003/0039170	A1	Soreau et al.	02/27/2003	
	A16	6,525,992	B1	Olivier et al.	02/25/2003	_
	A17	6,510,390		Bunting et al.	01/21/2003	
	A18	6,459,653	B1	Kuche	10/01/2002	,
	A19	6,256,589		Gallotti Guimaraes	07/03/2001	
	A20	6,088,298		Onat	07/11/2000	
	A21	6,031,789		Broussard et al.	02/29/2000	
	A22	6,028,817		Ambs	02/22/2000	-
	A23	6,011,753		Chien	01/04/2000	
	A24	6,011,752		Ambs et al.	01/04/2000	
	A25	6,005,828		Carroll et al.	12/21/1999	
	A26	5,995,452		Bouyoucus	11/30/1999	
	A27	5,924,049		Beasley et al.	07/13/1999	
	A28	5,920,828		Norris et al.	07/06/1999	
	A29	5,790,472		Workman et al.	08/04/1998	
	A30	5,784,335		Deplante et al.	07/21/1998	
	A31	5,771,202		Bale et al.	06/23/1998	
	A32	5,619,474		Kuche	04/08/1997	
	A33	5,532,975	:	Elholm	07/02/1996	
	A34	5,523,951		Kriesgman et al.	06/04/1996	
	A35	5,353,223		Norton et al.	10/04/1994	
	A36	5,281,773	l	Duren	01/25/1994	
	A37	5,184,329		Regnault et al.	02/02/1993	
	A38	5,142,498		Duren	08/25/1992	
	A39	5,113,377		Johnson	05/12/1992	
	A40	5,052,814		Stubblefield	10/01/1991	
	A41	4,974,212		Sheiman	11/27/1990	
xaminer	<u> </u>	.,,	I		Date Considered	
ignature					Date Considered	

Pro/SB/08A (10-96) Please type a plus sign	(1) inside this how	, m			Agreement for use through 10/21/00, OMD OCE1 0021
		_	equired to respond	to a collection of information unless it of	Approved for use through 10/31/99. OMB 0651-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE contains a valid OMB control number.
	4.440.4 (50.000)	1_,			Complete if Known
Substitute for form 1449A/PTO				Application Number	10/598,732
INF	ORMATION	DISCLOSU	RE	Filing Date	September 8, 2006
11	ATEMENT B			First Named Inventor	Kenneth E. Welker
				Group Art Unit	Unknown
	(use as many shee	ts as necessary)		Examiner Name	Unknown
Sheet	2	of	3	Attorney Docket Number	14.0248-PCT-US

						U.S. PATENT DOC	UMENTS		
Examiner	Cite No.1		. Patent Documer			of Patentee or Applicant	Date of Publication of Cited Document	Pages, Columns, Lines, Where Re Passages or Relevant Figures Ap	
Initials*		Numb		Code ²			10/02/1990	Passages of Relevant Figures Ap	ppear
			Young, II		09/19/1989				
	A43	} 	68,793		Dunba Brac	·			
	A44		62,422			land at al	08/29/1989		
	A45		98,156			land et al. um et al.	01/17/1989		
	A46		48,599		Huize		05/31/1988		
	A47	 	27,956				03/01/1988		
	A48		93,336		Newm		09/15/1987		
	A49		06,352			saeter et al.	03/19/1985		
	A50		04,664		Zacha		09/13/1983		
	A51		10,726			nce et al.	08/29/1978		
	A52		87,780		Itria et		05/02/1978		
	A53		63,213	+	Itria et		12/13/1977		
	A54		33,278		Water	her <i>et al.</i>	07/05/1977		
	A55		27,616				06/07/1977		
	A56		53,826			rit <i>et al</i> .	04/27/1976		
	A57		21,124		Paytor		11/18/1975		
	A58		79,638		Rusna		11/18/1969		
	A59	3,4	12,704		Buller	et al.	11/26/1968		
	<u> </u>					1.00			· · · · ·
Examiner Signature							Date Considered		
				F	OREI	GN PATENT DOCU	JMENTS		
		[I	Foreign Patent Do	ocument		Name of Patentee or	Date of Publication	Pages, Columns, Lines, Where	
Examiner Initials*	Cite No.1	Office ³	Number ⁴		Code ⁵	Applicant of Cited Document	of Cited Document	Relevant Passages or Relevant Figures Appear	T ⁶
	B1	GB	2 412 96	55	Α	Statoil ASA	10/12/2005	•	
	B2	wo	2005/0960)15	A1	Statoil ASA	10/13/2005		
	В3	WO	2005/0960	018	A1	West-Erngeoco Seismic Holdings Ltd.	10/13/2005		
	B4	GB	2 364 38	88	Α	Geco AS	01/23/2002		
	B5	WO	02/05965	50	A1	Petroleum Geo- Services AS	08/01/2002		
	В6	WO	01/5574	7	A1	Services Petroliers Schlumberger	08/02/2001		
	B7	EP	0 613 02	25	A1	Geco AS	08/31/1994		
	B8	EP	0 525 39	01	B1	Prakla-Seismos GmbH	02/03/1993		
	В9	EP	0 321 70)5	B1	Prakla-Seismos AG	06/28/1989		
	B10	EP	0 319 71	6	B1	Prakla-Seismos GmbH	06/14/1989		
Examiner Signature							Date Considered		

Pro/SB/08A (10-96)	
Please type a plus sign (+) inside this box \rightarrow	+.

Approved for use through 10/31/99. OMB 0651-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office: U.S Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

C. L. C. C.	5 1440 A 7070 O				Complete if Known		
Substitute for form 1449A/PTO				Application Number	10/598,732		
IN	FORMATION	DISCLOSU	RE	Filing Date	September 8, 2006		
STATEMENT BY APPLICANT			T	First Named Inventor	Kenneth E. Welker		
				Group Art Unit	Unknown		
	(use as many she	ets as necessary)		Examiner Name	Unknown		
Sheet	3	of	3	Attorney Docket Number 14.0248-PCT-US			

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Office ³	Foreign Patent Docu Number ⁴	iment Kind Code ⁵	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
·	B11	EP	0 018 053	B1	Shell Internationale Research Maatschappij B.V.	10/29/1980		
	B12	EP	0 018 053	A1	Shell Internationale Research Maatschappij B.V.	10/29/1980		
Examiner Signature						Date Considered		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ³ See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁴ Applicant is to place a check mark here if English language Translation is attached.

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.							
	C1	Schmidt, "Solution for seismic source registration," Worldoil.com, 226(9):1-3, September 2005.							
Examiner Signature		Date Considered							

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.